

## ABSTRACT

A novel efficacious and less irritant aluminum-zirconium antiperspirant composition is provided by the addition of a small amount of  $\text{AlCl}_3$  and/or  $\text{HCl}$  to the activated aluminum component. After the heating of diluted basic aluminum chlorohydrate solution, cooling to room temperature, mixing with small amount of  $\text{AlCl}_3$  or  $\text{HCl}$  and then reacting with zirconium glycine complex, an aluminum-zirconium salt is produced with a maximum amount of depolymerization aluminum and zirconium species. The addition of a small amount of  $\text{AlCl}_3$  or  $\text{HCl}$  to the diluted and activated aluminum chlorohydrate solution accelerates the depolymerization of the activated ACH solution, and upon the addition of zirconium glycinate the solution is further depolymerized and results in the formation of less polymerized zirconium species.